

Claims

We claim:

1. In a time division multiple access system, a method comprising the steps
5 of:
receiving a first requested call type;
setting a first slotting structure as an existing slotting structure for the
inbound and outbound channels based on the first requested call type.
- 10 2. The method of claim 1 wherein the first slotting structure is a preferred
slotting structure for the first requested call type.
3. The method of claim 1 further comprising the steps of:
receiving a second requested call type for a second call; and
15 denying the second call if there are not enough available channels in the
system to support the second requested call type.
4. The method of claim 1 further comprising the steps of:
receiving a second requested call type; and
20 determining whether the second requested call type can be supported by
the existing slotting structure.
5. The method of claim 4 further comprising the step of, if the second
requested call type can be supported by the existing slotting structure, granting the
25 second requested call type if there are enough available channels in the system to
support the second requested call type; otherwise denying the second requested all
type.

6. The method of claim 4 further comprising the steps of, if the second requested call type cannot be supported by the existing slotting structure:
determining whether the first requested call type can be supported by a second slotting structure required to support the second requested call type; and
5 if the first requested call type can be supported by the second slotting structure, changing the existing slotting structure to the second slotting structure, and granting the second requested call type.
7. The method of claim 6 further comprising the step of signaling the first
10 subscriber of the second slotting structure if the first requested call type can be supported by the second slotting structure.
8. The method of claim 4 wherein the second requested call type is selected from a group comprising: a subscriber unit telephone interconnect time division
15 duplex call, a subscriber unit-to-wireline console time division duplex call, a subscriber unit-to-subscriber unit half duplex call with reverse channel signaling, a subscriber unit-to-talkgroup half duplex call on one channel, and a subscriber unit-to-subscriber unit half duplex call without reverse channel signaling.
- 20 9. The method of claim 1 further comprising the steps of:
receiving a second requested call type for a second call;
determining that the second requested call type is assigned a higher priority than the first requested call type; and
if the second requested call type cannot be supported by the existing
25 slotting structure, dynamically changing the existing slotting structure to a second slotting structure that supports the second requested call type, and granting the second requested call type.

10. The method of claim 9 further comprising the step of terminating the first requested call type if the first requested call type cannot be supported by the second slotting structure.
- 5 11. The method of claim 9 further comprising the steps of:
determining a number of available channels in the system; and
if there are not enough available channels in the system to support the second requested call type, terminating the first requested call type.
- 10 12. The method of claim 1 wherein the first requested call type is selected from a group comprising: a subscriber unit telephone interconnect TDD call, a subscriber unit-to-wireline console TDD call, a subscriber unit-to-subscriber unit half duplex call with reverse channel signaling, a subscriber unit-to-talkgroup half duplex call, and a subscriber unit-to-subscriber unit half duplex call without
15 reverse channel signaling.
13. The method of claim 1 wherein the first slotting structure is one of an aligned slotting structure or an offset slotting structure.